



The Conservation Strip

John Marshall Soil & Water Conservation District

'Tis the Season to Make a Conservation Effort for Soil Health

by Roger Flint, Conservation Specialist

In the world of agriculture, we get very few opportunities to have an influence on how we treat our soils. This subsequently influences the health of our soils. Farmers usually have one season a year to improve soil health. This is just one chance to cover the soil, minimize the soil disturbance, increase living roots, and to provide for plant diversity. These are

all factors in making agriculture more sustainable. This business is unlike any other financial business: nature, and the seasons limit our opportunities to get it right. Where typical businesses may have many opportunities to change during a business year, our agriculture business risk is limited to the fall and spring seasons.



Rye cover crop along with corn residue will help protect fields over winter.

The fall season is when we can plant winter cover crops to provide the cover for our soils. This cover acts as a mulch to hold as much moisture as possible (like a sponge) and does not let the soil wash away. Traditionally winter provides heavy rains and snow which wash valuable nutrients out of the soil. Nutrients such as nitrates can flush into our streams and rivers causing water quality issues. These nutrients are ingredients of fertilizer which costs us money. As they leach out, more nutrients are required to sustain our soils and crops. This becomes a financial loss in our agriculture business model.

Planting our crops with minimum soil

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Fall 2019

Mission Statement

Our Mission is to provide leadership, technical assistance, information, and education to the citizens of Fauquier County in proper soil stewardship, agricultural conservation methods, and water quality protection so as to ensure the wise use of the county's natural resources.



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Conservation on the Other Side of the World (Pt. 2)

by Michael Trop, Conservation Education Specialist

I enjoy frequently traveling to different places around the world. In fact, the standard question when I return to work after traveling is “So where are you going next?”. In the Summer 2016 edition of this newsletter, I wrote about my experience traveling to Nepal and my observations of the conservation practices (or lack thereof in some cases) which were being implemented. In August, I once again traveled abroad, this time to England. During my visit, I again made some conservation observations.

The United Kingdom (of which England is a part) has been farmed for millennia and currently, about 70% of their land is dedicated to agriculture. This was apparent as any trip I took outside of London took me past rows of corn, fields of hay, and pastures of cattle and sheep. In some ways, parts of England’s landscape reminded me of areas here in Fauquier: some areas were flat, some had gently rolling hills, and some had steeper mountainside terrain. Apart from the similar landscape, I also observed similar conservation efforts. Just like in Fauquier, there were some farms which had excluded their livestock from streams (and some which hadn’t).

While my days in England were devoted to running around trying to see everything that I possibly could, my evenings were a time where I could relax and re-



Cows graze a pasture in West Sussex.

cover from the day. This often entailed familiarizing myself with British television programming. In doing this, I came across a British Broadcasting Corporation (BBC) news segment called “Focus on Farming”. This was part of a week-long effort to discuss on different farming and farm conservation topics including “Brexit” impacts, no-till production, impacts from climate change on farming, and dangers/safety hazards posed to farmers in their everyday work. I found these segments to be a fantastic way to educate the non-farming community about the efforts and challenges of farmers.

The BBC segment on no-till was particularly fascinating to me because the idea of no-till agriculture was presented as being new and unique. After returning to the States, I did some research and discovered that only 3% of the arable land in the United Kingdom is under no-till production while that number is 24% in North America.

I find visiting foreign countries to be incredibly fascinating, not only to experience the history, culture, and traditions, but also to view the rural landscape. While countries may be separated by thousands of miles, the goals and efforts to protect and conserve farmland can be found all around the world.



Round bales in a field in Salisbury, County Wiltshire.

'Tis the Season... (contd.)

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disturbance is most desirable because the soil life, fauna, and flora are not disturbed and can continue to grow. Planting our crops using no-till methods helps soil to improve productivity each season. When soil is plowed, or disked, it is disturbed, and the soil productivity and health is set back. With less fuel being used for plowing and disking the soil, we save even more money in the agriculture business model.

A sign of a healthy soil is an increase in root growth. We want to maximize our living root growth which holds the soil together, giving it structure. At the same time, healthy roots allow the water to better soak into the soil. Living roots help to break up heavy clay soil layers created by years of pulverizing, and pounding compaction by farm equipment. We want to grow as many roots as we can to provide more soil structure in the soil.

Plants act as a soil conditioner; however, not all spe-



Daikon Radish can be planted as a cover crop to help break up clay soil layers.

cies provide the same benefits to soil health. Cereal rye for example, can help with the uptake of nitrates during the winter. This plant holds nutrients in place preventing them from leaching down through the soil profile. Tillage radishes will grow a root mass to break up clay layers. Legume plants like crimson clover can be used to provide supplemental nutrients needed for the next crops. Plants can be valuable assets in the protection and enhancement of our cropland soils.

So now is the opportune season to plant needed winter cover crops. These plants can help condition and protect your soils.

The John Marshall Soil and Water Conservation District is providing cost share assistance to help you plant them through the Virginia Agricultural Cost-share Program (VACS). If you are interesting in applying, please contact us at www.johnmarshallswcd.com or telephone 540-347-3120 ext. 3. You can also come visit our office at 98 Alexandria Pike, Suite 31, Warrenton.

Fall VACS Cover Crop Planting Options

| | Non-Harvestable Small Grain | Harvestable Small Grain |
|--------------------------------|---|-------------------------|
| What can be planted? | Tetraploid Rye, Winter Rye, Winter Wheat, Winter Barley, Winter Hardy Oats, Winter Annual Ryegrass, Triticale | |
| Must Be Planted By | November 1 | October 10 |
| Base Cost-Share Rate | \$15/ac | \$20/ac |
| Early Planting Date | October 10 | None |
| Early Planting Bonus | \$25/ac | None |
| Rye Variety Bonus | \$8/ac | None |
| 60% Cover By | December 1 | |
| Stand Must Be Maintained Until | March 15 | |

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Hours: 7:30 am-4:30 pm
Monday-Friday

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SCBI Fall Lecture Series

The Smithsonian Conservation Biology Institute in Front Royal is hosting a lecture series covering a variety of species and ecosystems from around the world. Lectures are held every Wednesday in October at 7pm. The following is the list of lectures:

Oct. 2: "Male elephants & female farmers; conflict to resolution," Dr. Kate Evans, Elephants for Africa

Oct. 9: "Continuing Diary of a Coral Midwife, Chapter 42: A 'Tail' of Two Montiporids," Mike Henley, SCBI Hawaii

Oct. 16: "It's a Zoo Out There: Vet

Care of the Wild and Endangered," Dr. Kristi Delaski, SCBI Front Royal

Oct. 23: "Conservation on the Fly: How Landowners and Scientists are Working Together to Conserve Virginia's Grassland Birds," Amy Johnson, Ph.D., Virginia Working Landscapes

Oct. 30: "Building a Scientific Program with Global Partners to Save Giraffes from Extinction," Jared Stabach, Ph.D., SCBI Front Royal

For more information, visit: <https://nationalzoo.si.edu/education/lectures>

Calendar of Events

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|----------------|----------|----------------------------------|---------------|
| October 9 | 4:00 PM | John Marshall SWCD Board Meeting | JMSWCD Office |
| October 12 | | Fauquier County Farm Tour | |
| October 14 | | John Marshall SWCD Office Closed | |
| November 11 | | John Marshall SWCD Office Closed | |
| November 13 | 2:30 PM | John Marshall SWCD Board Meeting | JMSWCD Office |
| November 27 | 12:00 PM | John Marshall SWCD Office Closed | |
| November 28-29 | | John Marshall SWCD Office Closed | |
| December 8-11 | | VASWCD Annual Meeting | Norfolk, VA |
| December 11 | 4:00 PM | John Marshall SWCD Board Meeting | JMSWCD Office |
| December 24-25 | | John Marshall SWCD Office Closed | |

Staying Connected: The John Marshall SWCD makes it easy to stay connected through social media. If you're on Facebook, "Like" our page to get more-frequent updates on what's happening at the District.



The Conservation Strip is a quarterly publication of the John Marshall Soil & Water Conservation District. To be added to our email list, please send an email to Wendy Merwin at: wendy.merwin@fauquiercounty.gov.

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